Customer No.: 31561 Docket No.: 10767-US-PA

Application No.: 10/708,198

To the Claims:

Please amend the claims according to the following listing of claims and

substitute the same for all prior versions and listings of claims in the application.

Claim 1. (previously presented) A driving circuit used for a current-driven

active matrix organic light emitting diode (AMOLED), comprising:

a pixel connected to a current source, the current source being used to charge or

discharge a capacitor connected to a gate of a driving thin film transistor, and a gray

scale of the pixel is determined by a magnitude of a current provided by the current

source; and

a pre-charge switch directly connected to the gate of the driving thin film

transistor and a driving power source, for controlling the driving power source to

pre-charge the capacitor before the current source charges or discharges the capacitor,

wherein the pixel comprises:

an organic light emitting diode (OLED) having an anode and a cathode,

the cathode being connected to a first power source;

a first switch with one end connected to the anode of the OLED and

another end connected to a drain of the driving thin film transistor;

a second switch with one end connected to the current source and

another end connected to the drain of the driving thin film transistor; and

a third switch with one end connected to the drain of the driving thin

film transistor and another end connected to the gate of the driving thin film

Page 3 of 7

Customer No.: 31561

Docket No.: 10767-US-PA Application No.: 10/708,198

transistor and one end of the capacitor, the other end of the capacitor being

connected to a second power source.

Claims 2-6 (cancelled)

Claim 7. (previously presented) The driving circuit of claim 1, wherein the first,

the second, the third switches, the driving thin film transistor, and the pre-charge switch

are P-type thin film transistors.

Claim 8. (withdrawn) The driving circuit of claim 1, wherein the first, the

second, the third switches and the pre-charge switch are N-type thin film transistors.

Claim 9. (previously presented) The driving circuit of claim 1, wherein a

negative power source is used as the driving power source.

Claim 10. (previously presented) The driving circuit of claim 1, wherein a

pre-charged voltage level across the capacitor is substantially equal to a threshold

voltage of the thin film transistor.

Claim 11. (original) The driving circuit of claim 1, wherein the driving power

source comprises two different voltage levels.

Claim 12. (withdrawn) A method for driving a current-driven active matrix

Page 4 of 7

Customer No.: 31561 Docket No.: 10767-US-PA

Application No.: 10/708,198

organic light emitting diode (AMOLED) pixel, wherein a pre-charge switch is disposed

between a driving thin film transistor of the AMOLED pixel and a driving power source

and directly connected to the gate of the driving thin film transistor, a capacitor is

directly connected to the gate of the driving thin film transistor of the AMOLED pixel,

the method comprising the steps of:

directly pre-charging the capacitor through the pre-charge switch by using the

driving power source;

adjusting a gray-scale charging voltage of the capacitor by charging or

discharging the capacitor using a current source; and

stopping charging or discharging the capacitor through the current source to

control the AMOLED pixel to enter an illumination stage.

Claim 13. (withdrawn) The method of claim 12, wherein the capacitor is

pre-charged to a voltage that is substantially equal to a threshold voltage of the thin film

transistor.

Claim 14. (withdrawn) The method of claim 12, wherein the driving power

source comprises two different voltage levels.

Claim 15. (previously presented) The driving circuit of claim 1, wherein the

first power source is negative polarity.

Claim 16. (previously presented) The driving circuit of claim 1, wherein the

Page 5 of 7

Customer No.: 31561 Docket No.: 10767-US-PA Application No.: 10/708,198

second power source is positive polarity.